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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/885,597

Applicant(s)
John Tang

Examiner
Thomas Joseph

Group Art Unit
2773



☒ Responsive to communication(s) filed on May 4, 1999

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-31 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-31 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 6

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

1. Applicant's arguments filed on 5-12-99 have been fully considered but they are not persuasive. The art rejections based on Baecker, Johnson, STN Express, and Gudmundson accordingly stand, the reasons given are as follows.

Claim Objections

2. Claim 13 is objected to because of the following informality: claim 13, line 11 which reads "updating the cyclical display based on the determining" should read, "updating the cyclical display based on the determination." Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 13, and 29, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baecker and Johnson (pat. 5,880,729 345/348 3-9-99). Baecker discloses a computer readable medium for the storing of data and instructions (col. 4, lines 25 - 45).

Claims 1 and 13 are rejected. Baecker discloses an animation sequences where the animation appears to be repeatedly scanning over a given number of document sections (col. 8, lines 49 - 57). Baecker discloses modifying the appearance of the animation icon when the

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corresponding file or folder representing the icon changes (col. 8, lines 58 - 67). Baecker discloses a process which generates new animation frames whenever the file or folder representing the icon changes (col. 8, lines 58 - 67). Johnson teaches using transitional visual effects, or animation for allowing users to view the transition of an object between two different static states of elements within the GUI (col. 2, lines 40 - 50). It is obvious to one with ordinary skill in the art to cyclically display a series of frames as an animated sequence. Doing so is a widely used, user-friendly method in the art for signaling to the user a ready for input status. It is obvious to one with ordinary skill in the art to detect an event reflecting a change in the state of the container. Doing so permits the viewer to receive confirmation of changes in the contents of a file while eliminating the need for additional user input. It is obvious to one with ordinary skill in the art to determine based on the detected event whether an animated sequence does not reflect the state of the container. Doing so allows the user to detect whether a change has occurred to a computer file without the need for extra input. It is obvious to one with ordinary skill in the art to update the cyclical display based on the determination. Doing so informs the user of changes in the file without the need for extra input.

Claim 29 is rejected. Johnson discloses the use of animation which represent the characteristics of an object which can also be a container or be related to a container while the object is undergoing a change of state (col. 4, lines 20 - 33). The examiner takes official notice that a representation can also be interpreted as a type of a symbol. It is obvious to one with ordinary skill in the art for the process of claim 1, wherein the frames include characteristics that

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are symbolic of objects of the container. Doing so provides icons, both animated and static, which can save time because the images are more easily recognizable by the user.

Claim 31 is rejected. Baecker discloses a computer readable medium in rejected claim 1. The rationale of claim 29 is incorporated into claim 30.

5. Claims 2 - 4, 10, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baecker and Johnson (pat. 5,880,729 **345/348** 3-9-99) as applied to claims 1 and 13 above, and further in view of Gudmundson (pat. 5,680,619 **395/701** 10-21-97). Baecker discloses a computer readable medium for the storing of data and instructions (col. 4, lines 25 - 45).

Claim 2 is rejected. Gudmundson discloses individual objects undergoing a change in state represented by fish in an aquarium expressing behavior (fig. 33; col. 64, lines 49 - 67). Gudmundson discloses objects represented by the use of animated fish icons which make behavior responses such as schooling like fish in a body of water when they come in near proximity of one another on the computer display (fig. 33; col. 64, lines 49 - 67; col 65, lines 1- 15). It is obvious to one with ordinary skill in the art to incorporate the methods of displaying graphical items as fish or other icons into Gallagher and Baecker because doing so can reduce the need for the user to change position to view a screen or enter input when observing the progress of a software object. It is obvious to one with ordinary skill in the art to incorporate Gudmundson into the process of claim 1 taught by Baecker, wherein the cyclical display provides an intuitive representation of a degree of the change in the state of the container. Doing so allows the user to view and track changes without the need for additional input.

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Claim 3 is rejected. Gudmundson discloses representing similar objects by similar type of fish which school while representing less similar object by different types of fish which compete with one another (fig. 33; col. 64, lines 49 - 67). Gudmundson discloses a given number of fish representing the given number of objects (fig. 33; col. 64, lines 49 - 67). It is obvious to one with ordinary skill in the art to incorporate the methods of displaying graphical items as fish or other icons into Gallagher and Baecker because doing so can reduce the need for the user to change position to view a screen or enter input when observing the progress of a software object. It is obvious to one with ordinary skill in the art to incorporate Gudmundson into the process of claim 1 taught by Baecker, wherein the cyclical display reflects the numbers and types of objects. Doing so updates the user of types and number of active objects without requiring additional input.

Claim 4 is rejected. Gudmundson discloses a stay in tank behavior command which produces a bounce sound when a fish object collides with the given border (col. 65, lines 40 - 62). It is obvious to one with ordinary skill in the art to incorporate the methods of displaying graphical items as fish or other icons into Gallagher and Baecker because doing so can reduce the need for the user to change position to view a screen or enter input when observing the progress of a software object. It is obvious to one with ordinary skill in the art to incorporate Gudmundson into the process of claim 1 taught by Baecker, wherein the cyclical display embeds audio information in the generated frames. Doing so signals information regarding object state without requiring the user to neither take time to view the computer screen nor enter input into an input device.

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Claim 10 is rejected. The rationale for claim 10 is disclosed in claim 4.

Claim 14 is rejected. Gudmundson, Baecker, and Johnson disclose the rationale for claim 14 in rejected claim 2.

Claim 16 is rejected. Gudmundson discloses embedding sound into animated frames in rejected claim 4. Baecker and Johnson disclose the cyclical display of animated frames in rejected claim 1. Gudmundson, Baecker, nor Johnson teach using a cyclical sound to be embedded into a cyclical animation. It is obvious to one with ordinary skill in the art for the computer readable medium of claim 13 to further include instructions for embedding audio information in the cyclical display. Doing so informs the user that the computer is in a normal processing state without requiring that the user change positions to view some type of computer device.

6. Claims 5, 6, 9, 11, 12, 14-15, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baecker, Johnson (pat. 5,880,729 **345/348** 3-9-99), and Gudmundson (pat. 5,680,619 **395/701** 10-21-97) as applied to claims 1 and 2 above, and further in view of Gallagher. Baecker discloses a computer readable medium for the storing of computer readable data and instructions (col. 4, lines 25 - 45).

Claims 5 and 17 are rejected. Gallagher discloses using the rate of change the rate that new frame are displayed during animation when determining the quality of animation required for a given procedure (p. 220). Gallagher discloses color table animation where a palette is used for displaying color in an animated image (p. 222). Gallagher discloses color cycling for mapping a sequence of moving events onto a range of color indices (p. 223). Gallagher discloses color

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cycling being used for particle traces, especially fluid flow through a container (p. 223).
Gallagher discloses using a rate of change at a speed where colors appear to be moving (p. 223).
Gallagher discloses uses color cycling at a speed where animation appears on the screen thus giving the user an illusion of motion on the screen (p. 223). Gudmundson discloses providing an object and view menu where color, sound, motion, and size data corresponding to an object represented by a fish can be modified (col. 21, lines 50 - 67). It is obvious to one with ordinary skill in the art to incorporate the methods of displaying graphical items as fish or other icons into Gallagher and Baecker because doing so can reduce the need for the user to change position to view a screen or enter input when observing the progress of a software object. It is obvious to one with ordinary skill in the art to incorporate into the process of claim 2, wherein the cyclical display uses one of color variations, tempo, motion, and change in size to represent the degree of the change in the state of the container. Doing so signals information regarding object state while reducing the need for the user to change physical position for the entering of input and the viewing of an output display.

Claims 6 and 18 are rejected. Gudmundson discloses displaying representing the number of objects in the form of some type of animal in rejected claim 3. Rejected claim 5 incorporates the rationale for using color variations, tempo, and changing motion and size. It is obvious to one with ordinary skill in the art to incorporate into the process of claim 3, wherein the cyclical display uses color variations, tempo, motion, and change in size to reflect the number or type of the objects in the container. Doing so signals information regarding object state while reducing the

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need for the user to change physical position for the entering of input and the viewing of an output display.

Claim 9 is rejected. The rationale for claim 9 is disclosed in claim 6.

Claim 11 is rejected. The rationale for claim 11 is disclosed in claim 5.

Claim 12 is rejected. The rationale for claim 12 is disclosed in claim 6.

Claim 15 is rejected. Baecker discloses a computer medium with instructions for executing a program in rejected claim 1. The rationale for the rest of claim 15 is disclosed in claim 6.

7. Claims 7, 19 - 21, 25 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (pat. 5,880,729 **345/348** 3-9-99).

Claim 7 is rejected. Johnson discloses a RAM, ROM, and processor connected by a bus (fig. 4b). Johnson discloses using software in memory to display the status by displaying an animation sequence corresponding to the find button; the find button can be considered a type of software container (fig. 5; col. 3, lines 65 - 68; col. 4, lines 1 - 20). Johnson discloses displaying state changes which correspond with state changes (fig. 6; col. 4, lines 34 - 50). Johnson discloses detecting changing of software state through the use of active animation (fig. 6; col. 4, lines 34 - 50). Johnson discloses cyclically displaying an animated sequence in the form of a rotating button (fig. 5; col. 3, lines 65 - 68; col. 4, lines 1 - 20). Johnson discloses storing and executing programs such as a GUI in memory (fig. 4; col. 3, lines 44 - 64). It is obvious to one with ordinary skill in the art to provide a memory which includes a software container and an

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animated indicator program including computer code for monitoring the software container to detect an event reflecting a change in a state of the container, for determining based on the detected event whether an animated sequence does not reflect the state of the container, and for generating a series of frames to reflect a state of the container based on the determination. Doing so enable the computer programmer to provide a user-friendly method for the software user to track software states. It is obvious to one with ordinary skill in the art to display on which a series of frames is cyclically displayed in an animated sequence. Doing so makes the user aware when the software is in a normal processing state. It is obvious to one with ordinary skill in the art to provide a processor configured to execute programs in the memory. Doing so is the widely used method for executing code stored in memory.

Claims 19 and 25 are rejected. Johnson discloses detecting activity of a menu item (col. 4, lines 20 - 50). Johnson discloses updating an animated sequence as to reflect the activity of the button (col. 4, lines 1 - 50). It is obvious to one with ordinary skill in the art to detect activity of the closed container and to update the animated sequence so as to reflect the activity of the closed container. Doing so provides a method for updating the user with information regarding the processes being executed by the computer.

Claim 20 is rejected. Johnson discloses displaying an animated sequence (col. 4, lines 33 - 50).

Claim 21 is rejected. The examiner takes official notice that when a user of Microsoft Windows for DOS places the mouse cursor on an icon representing closed windows and other

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objects, the icon is replaced with corresponding information representing the software represented by the container. It is obvious to one with ordinary skill in the art to interrupt the display of the animated sequence when the corresponding software container is opened because stopping animation and removing of the corresponding icon is widely accepted method for reducing confusion for the user when an application, represented by an icon, is activated for user access.

Claim 30 is rejected. Johnson discloses a computer system in rejected claim 7. The rationale of claim 29 is incorporated into claim 30.

8. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over STN Express © 1996, Legarde (pat. # 5,721,908 **345/329** 2-24-98) and Johnson (pat. 5,880,729 **345/348** 3-9-99).

Claim 22 is rejected. STN Express discloses the coupling of a PC with a mainframe containing a database. STN Express discloses an emulator for the PC which emulates actions of the mainframe allowing the user on the PC to view actions of the mainframe. STN Express discloses a status bar located on the bottom of the PC screen with the word online or offline depending whether the emulator is connected to the mainframe. STN Express discloses displaying the word "online" in green when the mainframe awaits input from the PC user while displaying "online" in red when the user is instructed to await for output from the mainframe after input is entered. STN Express discloses displaying the word "online" in red to signal to the user when the request by the user is being processed. Legarde discloses coupling a database on a different server computer with user computer equipped with a browser where the user requests information from the database server (col. 23, lines 15 - 30). Legarde teaches accessing data

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through a network (vol. 23, lines 37 - 45). Legarde teaches networking on the Internet (col. 23, lines 15 - 45). The examiner takes official notice that output retrieved from a database server to a user computer is a reflection of actions taking place on the said database server. The examiner takes official notice that it is widely accepted in the art to detect if a first Internet computer has acted upon a software container in the second Internet computer. The examiner takes official notice that it is widely accepted in the art to provide animated icons on an Internet server wherein the user of a second computer system accessing the server can execute software stored on the server from the second computer system. It is obvious to one with ordinary skill in the art to detect if a second computer system has acted upon the container. Doing so allows the user to access a user-friendly, graphical based program on a server computer from another computer. It is obvious to one with ordinary skill in the art to update an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system. Doing so is a widely accepted method for allowing the user accessing a first computer from a second computer system for viewing a copy of the output from the first computer from the second computer.

Claim 23 is rejected. Claim 22 discloses networking a first and second computer together on the Internet. It is obvious to one with ordinary skill in the art to incorporate into the process according to claim 22, wherein the first computer system and the second computer system are connected to the Internet. Doing so is a widely accepted method which uses universal protocols for allowing a second computer to run software on a first computer.

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Claim 24 is rejected. Johnson discloses using a rotating animated icon to represent the changing software states associated with the icons while using static icon representations to represent specific static states (col. 5, lines 20 - 63). It is obvious to one with ordinary skill in the art for the process according to claim 22, further comprising displaying the animated sequence as disclosed by Johnson on the first computer system which is assigned the task of being a server computer. Doing so provides a method for the computer user to observe animated sequences and other graphical processes used for the tracking of database retrieval and other program runs being executed by the server computer.

Claim 26 is rejected. The rationale disclosed in claim 22 is incorporated herein.

9. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over STN Express ©1996, Legarde (pat. # 5,721,908 **345/329** 2-24-98), and Johnson (pat. 5,880,729 **345/348** 3-9-99).

Claim 27 is rejected. Baecker discloses a computer system which includes a memory, processor, and data storage device (fig. 1). Baecker discloses providing for the storing of instructions or code on a magnetic disk connected to memory by means of a bus (col. 4, lines 25 - 55). Baecker discloses a display device (fig. 1; col. 1, lines 43 - 55). STN Express discloses a method for allowing one computer to reflect the actions of another computer in rejected claim 22. STN Express discloses providing a window, object, or software container for running a mainframe emulation while other programs are also executing on the same computer system. The examiner takes official notice that instructions must be read into memory before a processor can

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execute the instructions. Baecker and Johnson disclose displaying animation in rejected claim 1.

It is obvious to one with ordinary skill in the art to provide a memory in a first computer containing code for performing a process for reflecting activity of a network-based software container associated with the first computer system, including code for detecting if a second computer system has acted upon the container, and code for updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system. Doing so allows a user to access a larger and more powerful computer system using only a portion of the resources provided by a different, smaller, and more accessible computer system. It is obvious to one with ordinary skill in the art to provide a display for the display the animated sequence. Doing so is the widely accepted method in the art for the display of moving images including animation. It is obvious to one with ordinary skill in the art to provide a processor configured to execute programs in memory because doing so is the widely accepted method in the art for running computer programs.

Claim 28 is rejected. The rationale of claim 28 is disclosed in rejected claim 27. It is obvious to one with ordinary skill in the art to provide a memory containing code for performing a process for reflecting activity of a software container that is closed, including code for detecting activity of the closed container and code for updating an animated sequence so as to reflect activity of the closed container. Doing so allows the user to run multiple programs on the local computer workstation and to view the running of the multiple programs on the computer workstation's display device.

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10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (pat. 5,880,729 **345/348** 3-9-99) as applied to claim 7 above, and further in view of Gallagher.

Claim 8 is rejected. Gallagher discloses varying degrees or time rates for observing animation sequences (p. 207, para. 2). Johnson discloses displaying a transition using animation to show the change of the state of a software container or button from a first state to a second state (col. 6, lines 60 - 70; col. 7, lines 1 - 25). It is obvious to one with ordinary skill in the art for the computer system of claim 7, wherein the cyclical display provides an intuitive representation of a degree of the change in the state of the container. Doing so provides the user with a user-friendly method for observing changes corresponding to software programs being executed on a computer.

Response to Arguments

11. Applicant's arguments filed May 4, 1999 have been fully considered but they are not persuasive.

The applicant has amended claims 1-18 to further clarify the invention while adding new claims 19-31. The applicant argues that the animation disclosed by Baecker takes place after occurrence of the event without regard whether the animated sequence reflects the state of the container. The applicant considers Baecker's sole dependence on an event as undesirable because an event occurring after a small or no change will trigger the entire update process. The applicant claims in his invention that unnecessary taxing of the system is reduced because a determination is made before animated updating takes place. The application also argues that Little fails to remedy

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the aforementioned deficiencies of Baecker because Little fails to disclose or suggest operations or elements related to an event reflecting a change in the state of the container and determining based on the detected event whether an animated sequence does not reflect the state of the container as claimed in combination in each of independent claims 1, 7, and 13.

The inventor adds claims 29-31 in order to clarify that the frames include characteristics that are symbolic of object of the container. The inventor states that the intention of these new claims is to contrast the invention from the thumbnail images in Baecker. The inventor continues by saying that a thumbnail is not symbolic of information contained in the container, because a thumbnail does not suggest anything other than the content of the thumbnail itself.

The examiner responds to the above arguments by the applicant. Johnson teaches producing animation of an icon only after the start of an event which involves a state change where the retrieval of data is involved (col. 3, lines 65 - 68; col. 4, lines 1 - 34). Johnson teaches animating only while the state is being change or when the user places an input device cursor over an animated icon (col. 3, lines 65 - 68; col. 4, lines 1 - 34). During the static state of the object within the container when the mouse cursor is located on a different area of the display space, the icon animation remains static (col. 3, lines 65 - 68; col. 4, lines 1 - 34). Gudmundson discloses providing an object and view menu where color, sound, motion, and size data corresponding to an object represented by a fish can be modified (col. 21, lines 50 - 67). It is obvious to one with ordinary skill in the art to incorporate the method disclosed by Gudmundson into Johnson in order

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to include sound with the animation. Doing so allows the user to observe the changing state without having to view the screen.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Joseph whose telephone number is (703) 305-2277. The examiner can normally be reached on Monday through Friday from 7:30 pm to 4:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim, can be reached on (703) 305-3821. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



MARK K. ZIMMERMAN
PRIMARY EXAMINER

tjj/6-1-99

